

REMARKS/ARGUMENTS

Claims 1-8 are pending in the application; the status of the claims is as follows: claims 1-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention; claims 1-6 are rejected under 35 U.S.C. § 102(b) and claims 7 and 8 are rejected under 35 U.S.C. § 103(a).

Claims 9-11 are withdrawn from consideration.

The indication, in the Office Action, that the Examiner has no objections to the drawings, is noted with appreciation.

Claims 1 and 4 have been amended to more distinctly claim the subject matter of the invention. These changes are not necessitated by the prior art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

35 U.S.C. § 112 Rejection

The rejection of claims 1-8 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention, is respectfully traversed based on the following.

The Examiner's suggestions regarding amending claims 1 and 4 to more distinctly claim the invention have been incorporated. Specifically, in claim 1, line 2, "defining" has been changed to "having". In claim 4, line 2, "formed of" has been changed to "formed from". Applicant respectfully notes the Examiner's suggestion on claim 2, line 2, a change from "is" to "are", is grammatically incorrect. The use of "is" is required as "said plurality", which is singular, is the subject. For this reason, the Applicant has not amended claim 2, line 2. These amendments incorporate the applicable suggestions by the Examiner to more distinctly claim the invention.

Accordingly, it is respectfully requested that the rejection of claims 1-8 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention, be reconsidered and withdrawn.

35 U.S.C. § 102(b) Rejection

The rejection of claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,900,877 to Dubrow et al. ("Dubrow"), is respectfully traversed based on the following.

The Examiner states he believes "that the expanded metal mesh inherently encompasses the open-celled metallic foam material or substantially interconnected electrically-conductive ligaments." The Applicant respectfully denies that Dubrow's expanded metal mesh inherently encompasses the metallic foam or the electrically-conductive ligaments. The Dubrow patent discloses use of a "woven or non-woven wire fabric or conductive fibers" (column 3, lines 43-45). Such a structure is essentially a two-dimensional structure, not a three-dimensional structure as is inherent in the metallic foam. The "expanded metal mesh" (column 3, line 48) is fundamentally a two-dimensional structure. Flattening such an expanded metal mesh returns it to its original two-dimensional state. This expanding and flattening process could be repeated a number of times with such a malleable metal mesh. In obvious contrast, a metallic foam is initially a three-dimensional structure, and while it can be flattened, this does not return it to its original two-dimensional state as it was not a two-dimensional structure originally. Further, such a flattened metallic foam cannot be re-expanded into a three-dimensional structure as can the metallic mesh of Dubrow. Further, while Dubrow does disclose a three-dimensional "pipe cleaner or bottle brush" (column 3, lines 46, 47), such a structure does not include "a plurality of cells interspersed throughout the electrically-conductive material" as required by claim 1. Thus, because Dubrow does not disclose or suggest a three-dimensional structure with a plurality of cells, Dubrow cannot anticipate or render obvious the invention of claim 1.

Claims 2-6 depend, either directly or indirectly, from claim 1. As claim 1 is considered unanticipated and non-obvious over Dubrow, claims 2-6 are considered unanticipated and non-obvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by Dubrow, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

The rejection of claims 7 and 8 under 35 U.S.C. § 103(a), as being unpatentable over Dubrow, is respectfully traversed based on the following.

While it may or may not be obvious to one of skill in the art to include glass or ceramic microballoons in a thermally insulating gel, the structure to which the thermally insulating gel is applied is unique in the present invention. Claims 7 and 8 indirectly depend from claim 1. As noted above, claim 1 is considered unanticipated and non-obvious over Dubrow, and therefore claims 7 and 8 are considered unanticipated and non-obvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Dubrow, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a

Application No.: 09/966,480
Amendment dated September 9, 2003
Reply to Office Action of June 16, 2003

fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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September 9, 2003

DAI 269126v3